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(Fermi 2 nuclear reactor & other environmental news)

Radioactive Effluent Release

Fermi's filing includes the Radiological Operating Report and the Independent Spent Fuel Storage Installation report for the 2020 year.

"Regulatory limits for radioactive effluents pertain to allowable offsite doses rather than to quantities of radioactive released," stated the report. "Some of the fission products released in airborne effluents are radioactive isotopes of noble gases, such as xenon and krypton. These noble gases are released continuously at low levels while the reactor is operating."

At Fermi 2, "tritium, a radioactive isotope of hydrogen with a half-life of 12.3 years, is released predominantly in the chemical form of tritiated water in which a tritium nucleus replaces the proton in one of the hydrogen atoms in a regular water molecule."

"Starting in 2009, U.S. nuclear power plants are expected to report releases of carbon-14 (C-14), half-life of approximately 5,730 years...the total 2020 C-14 release for Fermi 2 is estimated to be 10.9 curies."

There are statements in this document that need further investigation, "Fermi 2 monitors drinking water at one control location and one indicator location using automatic samplers," states DTE. "Indicator water samples are obtained at the Monroe water intake located approximately 1.1 miles south of the plant. Detroit municipal water is used for the control samples and is obtained at the Great Lakes Water Authority water intake in Allen Park, 18.6 miles north."

Citizens' Resistance at Fermi Two

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Annual Non-Radiological Report

The non-radiological report is filed with the NRC, but our state is the one with jurisdiction. That is because Michigan is "an agreement state" which issues and oversees the discharges into Lake Erie instead of the Environmental Protection Agency – which oversees the permits in other states.

"No terrestrial monitoring activities were conducted...Based on the findings of the terrestrial monitoring program which was concluded in 1994..." That was 26 years ago, shouldn't they take another look?

And other disturbing quotes include: "the NRC will rely on the Michigan Department of Natural Resources, which is now called the Michigan Department of Environment, Great Lakes, and Energy (EGLE), for the protection of the aquatic environment from non-radiological operational impacts via the National Pollution Discharge Elimination System (NPDES)."

CRAFT has reached out to the agency by both names and got stonewalled and told to file a Freedom of Information Act (FOIA) request if we wished to know anything. We mistakenly thought EGLE may be more receptive, but no.

In August, DTE requested that they only report Fermi's Phosphorus and Copper discharges quarterly to EGLE instead of monthly. In September, EGLE approved it.



Fermi Receives NRC Violation

The NRC completed an inspection at Fermi in March and gave DTE an non-cited violation for being cavalier in following rules and regulations.

"Specifically, on multiple occasions the inspectors discovered carts of compressed gas cylinders near safety-related equipment that were not restrained in accordance with plant procedures," stated the NRC report. "Examples included missing chocks, inappropriate standoff distance, storage of equipment not in accordance with existing engineering analyses, and exceeding restraint weight limits."

See full report in Documents Received.

Fermi Shuts Down

On the 17th, Fermi was at 0% power. A news article said DTE shut the reactor down to repair a valve. The article closed by reminding people 800 workers would be out of a job if Fermi closed.

We called the NRC Resident Inspector, and the number has been changed. So, we called the Regional Spokesperson and Viktoria Mitlyng said, "Fermi made a decision to shut down over the weekend to work on an issue they have been tracking. NRC inspectors have been aware of the plant's actions; continue to monitor ongoing activities; and don't have any immediate safety concerns."

Joe DeMare did a nice parody on his radio show. Check it out on our Facebook group.

Fermi went back to 100% on the 25^{th} , but downpowered on the 26^{th} and not back to full power until the 28^{th} . Too bad it did not stay down.

No Emergency Test at Fermi

DTE has requested an exemption from Fermi's Emergency Preparedness Test that is supposed to happen every two years. December 2018 was the last time and because of the pandemic, they have received exemptions every six months.

What makes this request different is that it has letters of support from the State of Michigan, Wayne County, and Monroe County.

DTE Energy's 10-K

As many of you know, a corporation must file a yearly report of their business with the U.S. Securities and Exchange Commission (SEC).

DTE's 2020 filing tell us "DTE Energy Company, directly or indirectly, the parent of DTE Electric, DTE Gas, and numerous non-utility subsidiaries."

But then it also states, "Any forward-looking statements speak only as of the date on which such statements are made." Does that mean all DTE's statements are only true when they are made?

Fermi's License Amendment #220

The NRC officially gave DTE a license amendment to use SNAP-IN neutron absorbers in Fermi's Spent Fuel Pool (SFP) instead of removing the degraded Boraflex rods and replacing them with Boral rods as promised in license condition 2.C (26)(c) when Fermi received a 20-year extension.

They did give us credit for trying to stop this, "By submittal dated March 9, 2020, Citizens' Resistance at Fermi 2 (CRAFT) requested a hearing on this application. On July 7, 2020, the Atomic Safety and Licensing Board denied CRAFT's hearing request. On August 3, 2020, CRAFT appealed the Board's decision to the Commission. On February 18, 2021, the Commission upheld the Board's decision."

The Amendment gave added information but contained a couple of disturbing notes. Disturbing was that they mentioned twice that Fermi was installing enough coupons (to test for degradation) to last 80 years. While some reactors have applied to run 80 years, Fermi has not.

The information included: The SFP will be limited to 3,590 fuel assemblies instead of 4,608. "The reactor shall contain 764 fuel assemblies."

"The reactor core shall contain 185 cruciform shaped control rod assemblies."



Nuclear Power Credit?

Three Democrat U.S. senators are set to introduce a measure that would subsidize nuclear reactors in the Biden Administration (which mistakenly believes nuclear is carbon free) Clean Energy for America Act.

Their (Ben Cardin, Sheldon Whitehouse and Bob Casey) amendment would provide a tax credit of \$15 per megawatt for existing reactors, but they will not ask for a vote on the measure at this time.

Would no vote allow time for the nuclear cartel lobbyists to write the legislation and donate more campaign money?

The Biden Administration needs to be educated on their mistaken faith in nuclear power as an aid to climate change.

What's Happening in Ohio?

FirstEnergy Corporation (previous owner of the Davis-Besse reactor before they started dealing it off to subsidiaries) fired another top executive as part of their trying to distance themselves from the HB6 nuclear bailout/bribery scandal.

Eileen Mikkelsen, vice-president and long-time FirstEnergy employee "was separated from the company effective as of May 27, 2021." Her charge was tied to the \$4.3 million "consulting payment" to the former head (Sam Randazzo) of the Public Utilities Commission of Ohio.

Randazzo has since resigned, along with five other FirstEnergy executives tied to the scandal.

Now, Ohio is considering bills that would let township boards block – or allow – wind and solar arrays to be built in their area. We hope no bribes flow in that decision.

May Fermi Documents Received

= ML21116A041. Map of US Independent Spent Fuel Storage Installations (ISFSI) aka, high-level waste concrete casks storage containers.

https://adamswebsearch2.nrc.gov/webSearch2/mai n.jsp?AccessionNumber=ML21116A041

= Event No. 55231. "Unanalyzed Condition." The door to the Reactor Building Steam Tunnel was left open (against rules and regulations) for approximately an hour on three days last month. This has happened four times during the last three years.

= ML2116A032. 2020 Annual Report of Safety Relief Valve Challenge Report, Mainstream Bypass Lines, and ECCS Cooling Performance.

"There were no instances in 2020 where reactor pressure was high enough to require Safety Relief Valve actuation." Good news, there.

And concerning the Emergency Cooling System, the "new licensing basis Peak Clad Temperature of 1,980 degrees F. for GE14 fuel and 2,150 F for GNF3 fuel. (GE14 is the old fuel Fermi used and some rods are still active; GNF3 is the new which was loaded at last spring's refueling outage.)

https://adamswebsearch2.nrc.gov/webSearch2/mai n.jsp?AccessionNumber=ML21116A032

= ML21120A161. Letter from NRC to DTE asking for more info about the Safety Evaluation (SE) for Fermi's SNAP-In's license amendment. "The draft SE is being withheld from public disclosure at this time because it contains proprietary information..." <u>https://adamswebsearch2.nrc.gov/webSearch2/mai</u> n.jsp?AccessionNumber=ML21120A161

= ML21123A219. Design Basis Inspection report. No violations.

= **ML2119A114.** Annual Non-Radiological Environmental Operating Report. See page 1.

https://adamswebsearch2.nrc.gov/webSearch2/mai n.jsp?AccessionNumber=ML21119A114

= ML21124A128. Integrated Inspection Report. See article, page 2.

https://adamswebsearch2.nrc.gov/webSearch2/mai n.jsp?AccessionNumber=ML21124A128

= ML21118B032. Annual Radioactive Effluent Release Report. See article, page 1.

https://adamswebsearch2.nrc.gov/webSearch2/mai n.jsp?AccessionNumber=ML21118B032

= ML21118A026. Changes to Fermi's Technical Requirements Manual, Volume 1.

= ML21126A206. A Fermi 3 Periodic Report showing no activity on building it. But we do not know why they cc'd four other nuclear companies. <u>https://adamswebsearch2.nrc.gov/webSearch2/mai</u> <u>n.jsp?AccessionNumber=ML21126A206</u>

= ML21137A234. DTE requests exemption for 2021 Biennial Exercise. See article, page 2. https://adamswebsearch2.nrc.gov/webSearch2/mai

n.jsp?AccessionNumber=ML21137A234

= ML21029A254. NRC issues License Amendment #220 for Fermi to use SNAP-INs neutron absorbers instead of rods. See page 2. <u>https://adamswebsearch2.nrc.gov/webSearch2/mai</u> <u>n.jsp?AccessionNumber=ML21029A254</u>

False Promises of Small Reactors

First, they are not small. They are enormous but produce 300 MW or less – except the Rolls Royce model which is 450 MW.

Modular means that a group of reactors at a single site could come on and off the grid to deal with demand. The Biden Administration mistakenly thinks this will help Climate Change.

An issue not discussed by the nuclear industry – or the government – is how ideal they are for producing plutonium for nuclear weapons, but that is a motivator behind the push.



To an anonymous donor who sent \$200!

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Or if you want it to be tax-deductible, make the donation out to Beyond Nuclear, (6930 Carroll Ave., Ste. 400, Takoma Park, MD 20912) and put FBO CRAFT in the memo line. Or contact Cindy Folkers to do it online – cindy@beyondnuclear.org

Every dollar spent on nuclear delays climate action





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